

EPA fails to follow landmark law to protect children from pesticides in food

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The landmark Food Quality Protection Act requires the Environmental Protection Agency to protect children's health by applying an extra

margin of safety to legal limits for pesticides in food. But an investigation by EWG, published this week in a peer-reviewed scientific journal, found that the EPA has failed to add the mandated children's health safety factor to the allowable limits for almost 90 percent of the most common pesticides.

The study in *Environmental Health* examined the EPA's risk assessments for 47 non-organophosphate pesticides since 2011, including those most commonly found on fresh fruits and vegetables, and found that the required additional tenfold safety factor was applied in only five cases.

"Given the potential [health](#) hazards of pesticides in our food, it is disturbing that the EPA has largely ignored the law's requirement to ensure adequate protection for [children](#)," said the study's author, Olga Naidenko, Ph.D., vice president for science investigations at EWG. "The added safety factor is essential to protect children from pesticides that can cause harm to the nervous system, hormonal disruption and cancer."

The Food Quality Protection Act of 1996, or FQPA, requires the EPA to set allowable levels for pesticides in a way that would "ensure that there is a reasonable certainty that no harm will result to infants and children from aggregate exposure to the pesticide chemical residue." It was hailed as a revolutionary recognition of the fact that children are more vulnerable to the effects of chemical pesticides than adults.

"Based on the strong consensus of the pediatric and the public health communities, the FQPA stated unequivocally that regulation of toxic pesticides must focus, first and foremost, on protecting infants and children," said Dr. Philip Landrigan, a pediatrician and epidemiologist who is director of the Program in Global Public Health and the Common Good at Boston College. "When the EPA fails to apply this principle, children may be exposed to levels of chemical pesticides that can profoundly harm their health."

Landrigan chaired the committee that authored "Pesticides in the Diets of Infants and Children," a 1993 report from the National Academy of Sciences. The groundbreaking study led to the FQPA's passage with bipartisan support and the backing of both industry and environmentalists.

"The FQPA was a revolution in how we think about pesticides' effects on children, but it does no good if the EPA doesn't use it," said EWG President Ken Cook. "It's not only necessary to protect kids' health, it's the law, and the EPA's failure to follow the law is an egregious betrayal of its responsibility."

Naidenko's study also examined EPA [risk assessments](#) for a particularly toxic class of pesticides called organophosphates, which act in the same way as nerve gases like sarin and are known to harm children's brains and nervous systems. She found that under the Obama administration, the tenfold children's health safety factor was proposed for all [organophosphate insecticides](#).

By contrast, in four assessments of pyrethroid insecticides, the EPA under the Trump administration has proposed adding the FQPA safety factor to none. In human epidemiological studies conducted in the U.S. and in Denmark, exposure to pyrethroid insecticides was associated with increased risk of attention deficit hyperactivity disorder.

In 2017, the EPA reversed the Obama administration's FQPA determination for chlorpyrifos, the most widely used organophosphate pesticide in the U.S. Despite the Trump EPA's decision, in the wake of bans by Hawaii, California and New York, the main U.S. chlorpyrifos manufacturer recently announced it will stop making this chemical. It remains to be seen whether the Trump EPA will uphold the tenfold FQPA determination for the entire group of organophosphates.

The study also found that the Trump EPA has proposed to increase by 2.6-fold the allowable exposure to the herbicide metolachlor. The use of metolachlor has been on the rise for the past decade, with more than 60 million pounds sprayed annually, according to the U.S. Geological Survey.

Biomonitoring studies conducted by the Centers for Disease Control and Prevention and by independent researchers reported the presence of multiple [pesticides](#) and their byproducts in the American population, including herbicides such as glyphosate and 2,4-D, the bee-killing neonicotinoid insecticides, organophosphate and pyrethroid insecticides, and fungicide metabolites.

More information: Olga V. Naidenko, Application of the Food Quality Protection Act children's health safety factor in the U.S. EPA pesticide risk assessments, *Environmental Health* (2020). [DOI: 10.1186/s12940-020-0571-6](#)

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